

ABSTRACT

DIAL ACCESS STACK ARCHITECTURE

5 A Dial Access Stack Architecture (DASA) includes a stack of Network Access
Servers (NASs) each independently establishing and processing information for
communication links on a public telephone network. A primary interconnect couples
the stack of network access servers together through a primary network. A routing
engine is coupled through the primary interconnect to the stack of network access
10 servers routing packets between the network access servers and an Internet network. A
secondary interconnect couples the stack of network access servers together through a
secondary network that operates independently of the primary interconnect. The
primary or secondary interconnects each allow pairs of the network access servers to
communicate with each other in parallel and independently of the routing engine. The
15 DASA provides scalability and resiliency to fault conditions and can easily aggregate
and integrate any new access media. Applications such as voice, video and
multicasting can be seamlessly added. The DASA architecture can scale from
hundreds to thousands of ports at optimal cost and performance while avoiding any
single point of failure.